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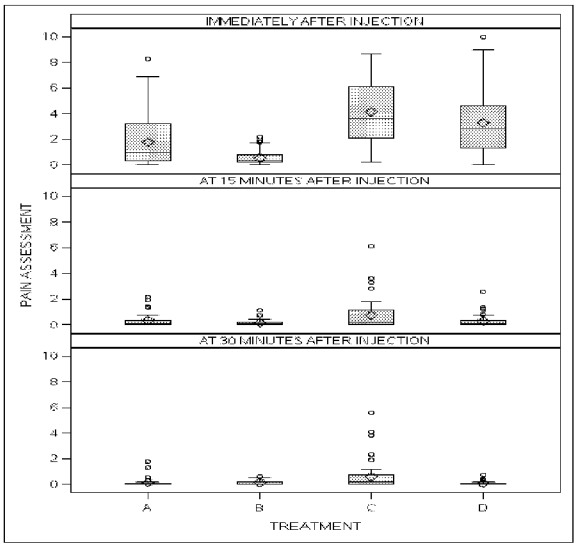
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(54) Title: IMPROVED HIGH CONCENTRATION ANTI-TNFα ANTIBODY LIQUID FORMULATIONS

(57) Abstract: The invention provides a liquid aqueous pharmaceutical formulation comprising a human anti-TNFa antibody, or antigen-binding portion thereof, which reduces pain associated with injection in a subject by at least about 50% when compared to injecting an otherwise identical formulation comprising at least one salt and/or at least one buffer. The invention also provides a liquid aqueous pharmaceutical formulation comprising a human anti-TNFa antibody, or antigen-binding portion thereof, having increased bioavailability upon subcutaneous administration into a subject. The formulation may comprise a therapeutic protein, such as a human anti-TNF-alpha antibody, or an antigen- binding portion thereof, or a biosimilar thereof.

Figure 1



A = High Conc. Formulation 1
B = High Conc. Formulation 3
C = High Conc. Formulation 4
D = Commercial Formulation

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